

What is claimed is:

1. A gas sensing element comprising:
 - a solid electrolytic substrate having oxygen ion conductivity:
 - 5 a measured gas side electrode provided on a surface of said solid electrolytic substrate so as to be exposed to a measured gas;
 - a reference gas side electrode provided on another surface of said solid electrolytic substrate so as to be exposed to a reference gas; and
 - 10 a porous electrode protecting layer covering said measured gas side electrode,
 - wherein a limit current density of said electrode protecting layer is in a range from 0.04 mA/mm^2 to 0.15 mA/mm^2 on a unit area of said reference gas side electrode under the following conditions:
 - 15 an oxygen concentration in said measured gas is 0.1%, a measurement temperature and an element temperature (an element surface temperature at the measured gas side of a sensing portion) are not less than 600°C , and a voltage applied between the measured gas side electrode and said reference gas side electrode is 0.5 V (i.e., an oxygen pumping in the direction from the measured gas side to the reference gas side).